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Clean Water Act Turns 30

Utahns, Americans Hold Monitoring Day

From coast to coast and just about every place in between they came out on Friday October 18, 2002 to test the water. Senior citizens, youth groups, schools, businesses and government agencies went to local water bodies to take part in the first national water quality monitoring day.

The national effort was part of celebrations to mark the 30th anniversary of the Clean Water Act.

Utah monitoring celebrations ranged from Monument Valley and St. George in the south to Logan and Bear Lake in the north.

Utah's Clean Water Program Pre-dates CWA

October 18th marked the 30th anniversary of the Clean Water Act (CWA), a landmark piece of legislation that has gone a long way toward cleaning up the nations waterways.

But in Utah we had a head start.

"While the nation is celebrating 30 years of accomplishment, here in Utah it's almost 50 years," said Don Ostler, director, Utah Division of Water Quality.

Utah has many beautiful, mostly pristine areas like this one, but many watersheds have been overused and degraded.

In 1953 the Utah State Legislature passed the first state water quality legislation, nearly 20 years before the federal law. So while the nation is assessing 30 years of accomplishments, Utah looks at a half century of work, according to Ostler. Some of the early milestone successes include.

- 1950—First municipal wastewater treatment plant constructed,
- 1953—Utah Water Pollution Control Act passed. Act sets water quality standard and treatment requirements for the first time,
- 1964—Last major Utah city gets waste water treatment plant,
- 1965—Federal Water Quality Act passed, providing grants for municipal wastewater construction,
- 1965—Major sewered Utah communities achieve secondary treatment,
- 1972—Federal Clean Water

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Highlights

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Act passed. Major legislation designed to stop pollution from business and industry, municipalities, and a variety of land uses.

The Act spelled out tough regulations and enforcement for industrial and municipal polluters. These points sources, as they are called, were the first primary focus of the legislation. In 1987, a revised version of the CWA provided a mechanism for funding cleanup of nonpoint sources (NPS).

"We've got a handle on point sources because we've spent about $500 million," Ostler noted. "If we did that for nonpoint sources we could do a lot."

Utah has spent about $14.5 million since 1990 cleaning up and trying to prevent NPS.

Since NPS is not regulated and is a lot more diffuse and widespread than are point sources, NPS is much harder to isolated and prevent.

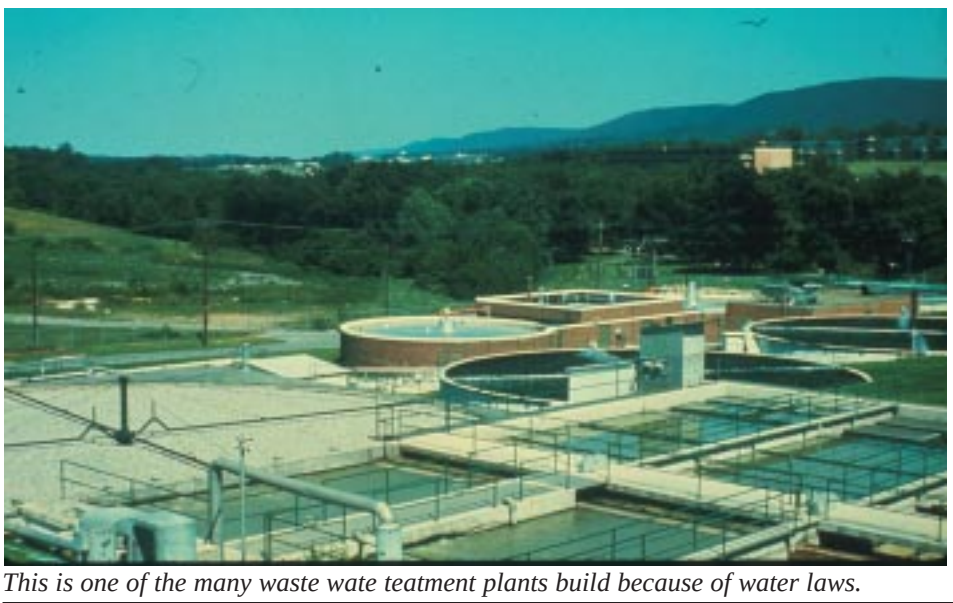
Despite the uphill battle, Utah is making strides in the areas of watershed assessment and restoration. Out of the 178 impaired waters in Utah, 56 water quality plans have been completed.

Improvements have been made in both point source and nonpoint source watersheds. For example, watershed restoration efforts in the Little Bear River drainage in Cache county has resulted in measurable water quality improvements. While there are some point sources in the Little Bear watershed, much of the work has been with NPS pollution from agriculture and other sources. On the other hand, much of the improvements along the Jordan River have come from point source cleanup and regulation. Biochemical Oxygen Demand in the river has been reduced from 27 milligrams per liter (mg/l) in 1948, to nearly 0 now.

Utah has also developed a nationally-recognized concentrated animal feeding operation (CAFO) strategy. The approach of allowing potential CAFOs time to correct problems and avoid being regulated as a point source has been applauded by EPA as a model for other states to follow.

But Ostler points out that Utah still faces a lot of water quality challenges for the future.

- Total Maximum Daily Load plans must be written and implemented throughout the state. Ostler believes that this will be one of the major challenges facing water quality administrators over the next few years. That is why the DWQ is looking toward finding ways to fund several local water quality coordinators to help with TMDL development and implementation.
- Storm water Phase II requirements will affect more than 70 communities and several more small construction sites. Every one of those communities must obtain permits, and write and implement plans for controlling storm water runoff.
- Utah's rapidly growing population will continue to put pressure on Utah's established cities and burgeoning communities alike. Not only will communities face pressure from increasing storm water runoff, they will also face additional volume and demands on wastewater treatment facilities.
- Utah's CAFO strategy, like the TMDL program, is on a tight timeline dictated by EPA. The state wants to continue to help local coordinators and commodity groups finish assessing farm animal operations and make needed improvements on schedule.
- The division also wants to play a key role in shaping the use of rapidly increasing USDA environmental quality funds that could go a long way toward controlling agricultural contributions to water pollution problems throughout Utah.



This is one of the many waste wate teatment plants build because of water laws.

Groups Band Together to Protect Jordan River Wetlands

A group of private and government agencies from throughout the valley have joined together to protect the few remaining wetlands and uplands of the Jordan River.

The group called the Jordan River natural Areas Forum signed a "memorandum of understanding" in October designed to focus efforts at preserving those few remaining natural areas along the river corridor.

Signatories include mayors of all the cities that share the Jordan River's banks, environmental organizations, the U.S. Fish and Wildlife Service and the U.S. Natural Resources Conservation Service.

While the memorandum contains no mandates or penalties, organizers believe it is the most workable option available.

"It's unforceable and voluntary, but hopefully a good thing," said Joan Digiorgio, planner for the Utah Reclamation Mitigation and Conservation Commission, a federal agency charged with mitigating environmental damage caused by the Central Utah Project water development project.

Utah Governor Mike Leavitt signed the document, vows support from state environmental and natural resource agencies in the multi-jurisdictional effort.

In tight budget times the forum will not seek new state funding. Instead the group will try to better use the funds that cities, environmental organizations and federal agencies already have access to. The effort may also tap into the state's LeRay McAllister Open Space Fund.

In a report two years ago, the forum identified 1,500 acres of Jordan River wetlands and uplands, most of them south of 12300 South, as having good wildlife habitat and worthy of preservation.

So far, about 300 of those acres have been secured, mostly through land purchases by private environmental groups and the Central Utah Project mitigation commission. The forum is still working on getting the other 1,200 acres.

Prior to Mormon settlement, there were an estimated 12, 480 acres of high quality wetlands and upland habitat.

Utah Watershed Review

Editor .....Jack Wilbur

Editorial Review

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Provo Students Make Waves with Water Project

(Provo Canyon, Utah) - A Provo High School science teacher and his students embarked on an exciting four-month quest not knowing how it would all end. They spent their summer on the Provo River, collecting samples of the water from the Uintah Mountains all the way down to Utah Lake. They wanted to know one simple thing: Is the water quality of the Provo River good or bad?

What they discovered pleased them—and concerned them. After collecting water samples at 30 sites along the river and analyzing the data, they concluded that the Provo River is generally in good shape, especially near Jordanelle Dam. However, as the river meanders to more populated areas, the quality of the water degrades somewhat.

"The cleanest water we had all summer was just below Jordanelle Dam," said science teacher Ty Robinson. "It was cool, clear and had good oxygen content. Not surprisingly, the dirtiest water was in Provo. But overall, the river is clean."

In addition, Robinson and his students confirmed that what goes down storm drains impacts the health of the river. Storm drains capture water flowing across streets and parking lots. As it flows, the water picks up trash, dirt, oil, animal waste, fertilizer and other things left behind by motor vehicles, people and animals. This polluted water, known as runoff, goes directly into our streams, lakes and rivers. Runoff pollution affects fish and other wildlife and can also contaminate drinking water supplies.

"We saw evidence of runoff pollution toward the end of the Provo River where the population base is located," Robinson said. "That part of the river receives water from storm drains."

Robinson and his students also learned that water conservation makes a difference. Unnecessary water use not only contributes to water shortages but also adds to the volume of wastewater that must be treated by sewage treatment plants. Conservation helps preserve the environment by decreasing pollution.

"The Provo River Watershed will retain its high quality and beauty if we improve our efforts to protect it," Robinson said.

Don Ostler, director of the Utah Division of Water Quality, echoes that sentiment. "In this time of substantial population growth, the only way we will have success is if we increase our knowledge of water pollution and commit to change personal habits."

Robinson said their project barely scratched the surface compared to what others are doing. So, why then go to all the effort? "The Provo River is our life blood," Robinson said. "The river is in good shape, but we need to take better care of it."

There's still more to be done. This project produced 20 spin-off projects that Robinson and his students can't wait to begin. "The Provo River has been the best teaching tool I've ever had, and my students are excited about doing more," he said.

To help with the Provo River project, Robinson recruited about seven high school students but said that as many as 50 people worked on some aspect of the project. They consulted water experts from the Central Water Conservancy District and Utah Division of Water Quality. In addition, Robinson was able to use the hydrogeology lab at Brigham Young University (BYU) to analyze their samples. The students also used an electron microscope at BYU to take pictures of diatoms, a unique form of algae.

"I'm really proud of what my students have done," Robinson said.

This past week, Robinson and four of his students attended the Youth Watershed Summit in Maryland where they presented their project. While there, they also participated in a watershed study of the Chesapeake Bay, visited the Smithsonian Environmental Research Center and the Baltimore National Aquarium and met with First Lady Laura Bush and EPA Administrator Christie Todd Whitman.

The Youth Watershed Summit was part of a national celebration to commemorate the 30th anniversary of the federal Clean Water Act. In Utah, Gov. Mike Leavitt has signed a declaration establishing October 2002 as "Clean Water Month" and 2002 as the "Year of Clean Water."

Information on the Youth Watershed Summit is available on the Smithsonian Environmental Research Center's Web site at www.serc.si.edu. The Web site for America's Clean Water Foundation, a sponsor of the summit, is www.acwf.org. For more information on the "Year of Clean Water," please visit www.yearofcleanwater.org.

If your school or community would like to participate in a similar project, please contact Shelly Quick at (801) 538-6516 for more information about the Utah Division of Water Quality's Adopt-a-Waterbody program.

Provo High School teach Ty Robinson and some of his students show off an award they received at the Utah NPS Conference in Vernal in September.

EPA Administrator Celebrates CWA Anniversary in New Jersey

On the national level, U.S. Environmental Protection Agency Administrator Christie Whitman celebrated the 30th anniversary of the Clean Water Act and the establishment of National Water Monitoring Day. At the same time, Whitman announced that President George W. Bush today declared Oct. 18, 2002 as the start of the observance of the Year of Clean Water, through a Presidential Proclamation.

Whitman praised the landmark Clean Water Act legislation, enacted 30 years ago on Oct. 18, l972, "Thirty years ago, many of America's waters had become too dirty for swimming, fishing and drinking. Today, thanks largely to the Clean Water Act, the nation's waters are once again, safe, healthy and clean. These achievements are unparalleled in the world."

Whitman celebrated the 30th anniversary in New Jersey with students from Alexander D. Sullivan School, PS #30. The Administrator and students monitored water at Liberty State Park.

The anniversary marks a milestone in the nation's efforts to protect and restore valuable water resources. Among the accomplishments under the Clean Water Act:

- the federal government has provided more than $80 billion in wastewater treatment assistance to the states and localities. In 1968, only 86 million people were served by modern sewage treatment. Today of the 207 million people served by wastewater treatment facilities, more than 97 percent (201 million people) are served by secondary or better treatment. These important advances in wastewater treatment constitute one of the major achievements in modern American public health;
- the Clean Water Act permit program has resulted in the reduction of 700 billions of pounds of pollutants no longer discharged into waterways;
- the nation is close to achieving its goal of halting overall wetlands loss;
- in the past decade, the United States has preserved, restored and/or created hundreds of thousands of acres of habitat nationwide as part of the National Estuary Program;
- the nation is using the 30th anniversary as an opportunity to recommit to making all waters fishable and swimmable.

October 18th was also designated National Water Monitoring Day to acknowledge the contributions of more than half a million volunteers who regularly monitor water quality. Today, thousands of citizens, students volunteer water monitoring organizations and water professionals from around the country will be monitoring their local rivers, streams, lakes, bays and wetlands. Additional information on the 30th Anniversary, National Water Monitoring Day, the Year of Clean Water and anniversary activities is available at: http://www.epa.gov/water/yearofcleanwater.

Groups Work Together to Monitoring Great Salt Lake Watershed

From the headwaters of Big Cottonwood Creek to the mouth of the Jordan River volunteer groups gathered on October 18, 2002 to monitor the water as part of a special focus on the Jordan River watershed in the middle of the national monitoring day.

The special organized effort was the brain child of Jeff Salt, the self-proclaimed Great Salt Lake Keeper and aquatics director for the Great Salt Lake Audobon Society.

Salt wanted to use the day as an opportunity to raise awareness of the importance of the Clean Water Act and show how water changes as it moves through a watershed.

Using the Bend in the River, Urban Treehouse along the Jordan River at about 1200 South as the command center, Salt and a 4th grade class from nearby Riley Elementary School, recorded data phoned in from other sites and conducted their own tests.

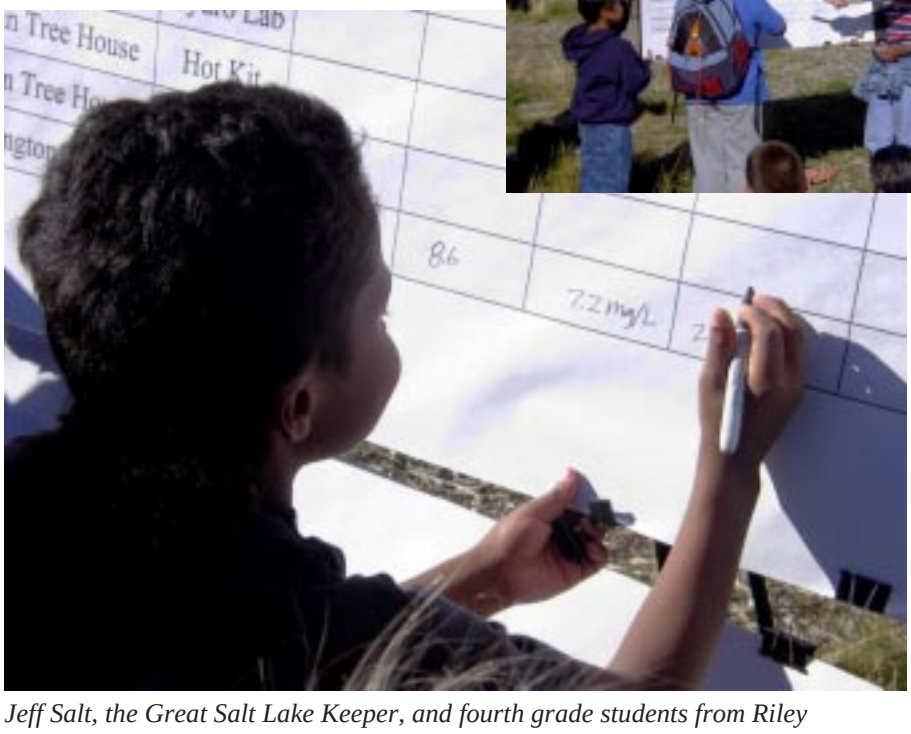
Most of the volunteer groups in Utah and around the country used simple test kits made available by the organizations sponsoring the Year of Clean Water activities.

Thanks to the US Geologic Survey, the Riley Elementary kids also got to conduct tests with a sophistocated Hydrolab machine that costs several thousand dollars.

Fourth grade teacher Joy Gasperini has been bringing students to the river for years.

"Being out here lets them take pride and a sense of ownership in the community they live in," said Gasperini. "It's also a chance for children to start to think about the environment they live in; taking care of the water and the air and those kinds of environmental issues."

Students from Glendale Middle School in Salt Lake City use testing kits owned by the school to test for dissolved oxygen and other pollution indicators. They are testing at the Peace Trees site (approximately 1600 S. and 1200 W.) along the Jordan River as part of the watershed-wide coordinated effort.



Jeff Salt, the Great Salt Lake Keeper, and fourth grade students from Riley Elementary School in Salt Lake City stand at the bend in the river site along the Jordan River at about 1100 S. They receive and record data from the other sites along the river via a cell phone. More than a dozen sites reported.

Late in the day Salt put on waders and to various sites retrieving shopping carts and other debris from the river.